

1. How do you write a system of linear equations in two variables? Explain this both in words and by using mathematical notation (an equation).
2. What are two symbolic techniques used to solve linear equations? Which do you feel is better? Explain why.
3. How many solution sets do systems of linear inequalities have? Must solutions to systems of linear inequalities satisfy both inequalities? In what case might they not?
4. How many solutions does a system of linear equations in three variables have? Can systems of linear equations have infinitely many solutions? Under what circumstances could that occur?
5. Identify four-steps to solving a linear system in three variables. Do these steps have to be done in a certain order? Are there any steps that could be skipped? Explain why or why not
6. Do the equations  $x = 4y + 1$  and  $x = 4y - 1$  have the same solution? How might you explain your answer to someone who has not learned algebra?